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### CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

Eleventh meeting  
Hyderabad, India, 8-19 October 2012  
Item 5.2 of the provisional agenda\*

#### **COLLABORATIVE AND MAINSTREAMING ACTIVITIES WITH THE HEALTH SECTOR: PROGRESS REPORT**

*Note by the Executive Secretary*

#### **I. INTRODUCTION**

1. The Executive Secretary is pleased to circulate herewith, for the information of participants in the eleventh meeting of the Conference of the Parties, a progress report on the collaborative and mainstreaming activities for biodiversity undertaken with the health sector in the period May to September 2012 and information on activities in planning for 2013. It is therefore relevant to agenda item 5.2 at the eleventh meeting of the Conference of the Parties.
2. A summary report of biodiversity and health activities for the period January 2011 to November 2012 was prepared for the sixteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/16/INF/34) and it also contains further information that is relevant to this agenda item.
3. The Executive Secretary gratefully acknowledges the provision of a programme officer from the government of Victoria (Parks Victoria, Australia) to support the work of the Secretariat, with a particular focus on biodiversity and human health activities, for the period October 2010 to November 2012.

#### **II. HEALTH AND BIODIVERSITY LINKAGES**

4. Health is often considered one of our most basic human rights and therefore one of the most important indicators of sustainable development. Several seminal publications, including the 2005 reports of the Millennium Ecosystem Assessment and the 2007 report of the Intergovernmental Panel on Climate Change, noted that human health is affected by the state of the global environment and the health of ecosystems. As such, biodiversity can be considered as a foundation for human health. Biodiversity underpins the functioning of the ecosystems on which we depend for our food and fresh water; aids in regulating climate, floods and diseases; provides recreational benefits and offers aesthetic and spiritual enrichment.
5. Our fundamental reliance on biodiversity and ecosystem services offers significant opportunities to more consistently recognize and manage biodiversity's services for human health and to contribute to biodiversity conservation and sustainable use at all scales.

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\* UNEP/CBD/COP/11/1.

6. Human health and biodiversity co-benefits can be considered in a variety of contexts, such as, *inter alia*:

- (a) Ecosystem integrity, changes to biodiversity and vector-borne diseases;
- (b) Drinking water, ecosystem change and restoration, and water-related diseases;
- (c) Non-communicable diseases, lifestyle and diet changes, and biodiversity conservation;
- (d) Traditional knowledge, nutrition, poverty reduction and biodiversity conservation; and
- (e) Climate change, ecosystem change, biodiversity conservation and human health impacts.

7. The current rate of biodiversity loss may potentially have grave consequences and hamper efforts to meet many development goals, especially those related to poverty, hunger and health, by increasing the vulnerability of the poor and reducing their options for sustainable development. The poor and most marginalized, and particularly children, suffer first and most severely as they rely directly on biodiversity and associated ecosystem services for their very survival.

### III. DECISIONS IN SUPPORT OF BIODIVERSITY AND HEALTH

8. Seventeen decisions were adopted at the tenth meeting of the Conference of the Parties (COP10) that make reference to human health and well-being. In addition, the Strategic Plan for Biodiversity vision notes that sustaining a healthy planet delivers “benefits essential for all people”.

9. The most detailed reference to health and biodiversity linkages is made in paragraph 17 of decision X/20 which requests that the Executive Secretary:

(a) Recalling paragraph 9 of decision IX/27, further strengthen collaboration with the World Health Organization as well as other relevant organizations and initiatives with a view to promoting the consideration of biodiversity issues in health programmes and plans as appropriate, including the Strategic Plan for Biodiversity 2011-2020, and as a contribution to the achievement of the relevant Millennium Development Goals;

(b) Investigate how implementation of the Strategic Plan for Biodiversity 2011-2020, including on targets and issues relating to access and benefit-sharing, can best support efforts to address global health issues, and thereby facilitate consideration of biodiversity within national health strategies in line with the World Health Declaration,<sup>1</sup> and in support of the Millennium Development Goals and report thereon to the World Health Assembly at its sixty-fifth session, in 2012;

(c) Explore avenues for bridging the gaps between work being carried out to address the impacts of climate change on public health and work to address the impacts of climate change on biodiversity; and

(d) Continue collaborating with the Co-operation on Health and Biodiversity (COHAB) Initiative and other relevant organizations to support the mainstreaming of biodiversity issues into health policy and action plans.

10. The Secretariat of the Convention is working with a range of Parties, other Governments and relevant international organizations and partners on key biodiversity and health activities. The four key activities are listed below and progress on each is described in sections IV, V, VI and VII:

(a) Strengthening collaboration and partnerships with other conventions and international organizations to promote the consideration and integration of biodiversity and health co-benefits;

(b) Contributing to knowledge generation and lesson-sharing on issues relevant to biodiversity and health for the implementation of the Strategic Plan for Biodiversity 2011 – 2020;

(c) Developing regional capacity-building workshops on biodiversity and health linkages, in support of the Strategic Plan for Biodiversity 2011 – 2020;

<sup>1</sup> World Health Assembly resolution WHA51.7, annex.

(d) Developing a range of outreach materials to promote and support the cross-cutting relevance of health in the CBD programmes of work, Strategic Plan and Aichi Biodiversity Targets, and national biodiversity strategy and action plans.

#### IV. STRENGTHENING COLLABORATION AND PARTNERSHIPS

11. To foster new partnerships and further strengthen collaboration with the World Health Organization (WHO) and other key organizations and initiatives to promote the consideration of biodiversity issues in health programmes and plans, in support of decision X/20, the Secretariat has carried out a broad range of collaborative activities in 2012, and several others are being planned for 2013.

12. Because the Convention on Biological Diversity and its implementation are of fundamental importance to the key international agreements on health, and considering the major challenge of ensuring that the value of and linkages with biodiversity are reflected in national health strategies, the Secretariat is working closely with the World Health Organization to highlight policy linkages and connect the objectives of the Convention on Biological Diversity and the framework provided by the Strategic Plan for Biodiversity 2011-2020 with the aims of national and regional health policies and strategies.

13. An initial activity jointly carried out by CBD and WHO to highlight policy linkages and identify potential collaborative activities was the co-hosting of an expert workshop, on 2 April 2012<sup>2</sup> in Geneva, which sought to:

- (a) Share biodiversity and health knowledge;
- (b) Collaboratively examine common areas of work and potential joint work activities in light of respective mandates; and
- (c) Discuss challenges, ways to overcome barriers and establish future collaborative steps.

14. Other collaborative activities with WHO which followed the expert workshop include: convening the first in a series of regional capacity-building workshops on the interlinkages between human health and biodiversity, in collaboration with the Pan American Health Organization/WHO regional office for the Americas; collaborating on a range of outreach publications; providing inputs to the WHO sixty fifth Session of the World Health Assembly, to the fifteenth and sixteenth meetings of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and to the eleventh meeting of the Conference of the Parties.

15. Collaboration on health and biodiversity with WHO and other United Nations agencies was also strengthened through the development and launch of a new joint publication at the United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20. As reported in the 67th session of the United Nations General Assembly (UNGA 67), particularly notable among the activities at Rio+20 was the release of a WHO-led discussion paper entitled “Our Planet, Our Health, Our Future”, which was co-authored by the WHO and the secretariats of the three Rio Conventions.<sup>3</sup> The discussion paper was launched at Rio+20 with the participation of the Director-General of WHO and the Executive Secretary of CBD.

16. The report underscores the growing evidence of the acute impacts of global environmental change which “is driving renewed consciousness among the world’s peoples and nations of the need to act quickly to protect the planet’s ecological and climatic systems. In this context, new emphasis on the human health dimensions of global environmental change offers a strong motivation for concerted global action to address challenges such as climate change, biodiversity loss and land degradation. Health is a major component of environmental concern in many countries, and a new focus on health may help shore up public support for progress towards new, more ambitious global environmental policies.”

17. The report also calls for reinvigorated partnerships between the major multilateral environmental conventions and the World Health Organization, the Food and Agriculture Organization of the United

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<sup>2</sup> All relevant documents can be accessed on the website for the meeting at <http://www.cbd.int/doc/?meeting=WSHB-01>.

<sup>3</sup> The three Rio Conventions include Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD).

Nations, and United Nations Environment Programme, among other partners, noting that environmental and ecological factors that impact human health also cut across more than one of the multilateral environmental agreements, and that environmental and human health linkages demand an integrated approach that can be supported by the unique position of the United Nations system to improve coordination.

18. To further strengthen collaborative work in the future, CBD and WHO are also discussing the establishment of a co-chaired liaison group on biodiversity and health which would invite the collaboration of several international partners.

19. A broad range of other activities have also been undertaken to foster partnerships and strengthen collaboration with other conventions, international organizations and initiatives including:

(a) Contributing to the work of the Scientific Task Force on Wildlife and Ecosystem Health (co-convened by the Food and Agriculture Organization of the United Nations and UNEP-Convention on Migratory Species) as a core affiliate;

(b) Being a representative on the International Steering Committee for the Eco-Health Biennial Conference, to be held in Kunming, China from 15 to 18 October 2012; and

(c) Assisting with three side events for the sixteenth meeting of SBSTTA with EcoHealth Alliance and DIVERSITAS; UNU-Institute of Advanced Studies (UNU-IAS) and partners; and University of Quebec at Montreal (UQAM).

(d) Delivering presentations on the Strategic Plan for Biodiversity and linkages to global health issues at (i) the United Nations China One Health Event, in June 2011; (ii) the ICLEI Liveable Cities Forum in August 2011 (iii) the Healthy by Nature Forum co-organised by British Columbia Parks/Healthy Families, in September 2011 and iv) Planet under Pressure Conference, London in March 2012; and

(e) Further strengthening collaboration with a range of organizations and initiatives, in addition to those outlined above, including in particular with IUCN, OIE, UNEP, FAO, DIVERSITAS, Center for Health and the Global Environment at Harvard Medical School, EcoHealth Alliance, the COHAB INITIATIVE (Cooperation on Health and Biodiversity) and the International Association for Ecology and Health (eco-health).

## **V. PROGRESS REPORT ON REGIONAL CAPACITY-BUILDING WORKSHOPS**

20. In decision X/5, on the Implementation of the Convention and the Strategic Plan, the Conference of the Parties (COP) requested the Executive Secretary, in collaboration with Parties, other Governments and relevant international organizations to continue facilitating the provision of support to countries for capacity-building activities, including through regional and/or subregional workshops on updating and revising national biodiversity strategies and action plans, the mainstreaming of biodiversity and the enhancement of the clearing-house mechanism.

21. In decision X/2 adopting the Strategic Plan for Biodiversity 2011-2020, Parties were urged to review and, as appropriate, update and revise their national biodiversity strategies and action plans, in line with the Strategic Plan.

22. In response to these decisions, and in support of decision X/20 to promote the mainstreaming of biodiversity issues in health programmes and plans and to investigate how implementation of the Strategic Plan for Biodiversity 2011-2020 can best support efforts to address global health issues, the Executive Secretary, in collaboration with relevant partners including the World Health Organization and financial support of the Government of Japan, is undertaking a series of regional capacity-building workshops on human health and biodiversity.

23. The first regional workshop on the inter-linkages between biodiversity and human health for the Americas was held in Manaus, Brazil from 4-6 September 2012. The workshop was co-hosted by the Secretariat of the Convention on Biological Diversity, the Pan American Health Organization/World Health Organization (PAHO/WHO), with the generous financial support of the Government of Japan, the Oswaldo Cruz Foundation (FIOCRUZ) and the Ministry of Health of Brazil.

24. In total, 52 participants from 25 countries representing Ministries of Environment, Ministries of Health, as well as representatives from local and indigenous communities and national, regional, and international organizations and institutions South America, Central America, the Caribbean and North America gathered for the workshop in Manaus, Brazil.

25. The regional workshop provided an opportunity for participants to exchange national or sub-national experiences and practices for implementation, and to pursue new areas of regional cooperation to address issues relevant to health and well-being, thereby contributing to the fulfilment of the Aichi Biodiversity Targets.

26. The workshop sought to strengthen capacity at national and regional levels to:

- (a) Identify policy information gaps on the links between health and biodiversity;
- (b) Facilitate cross-sectoral communication and collaboration particularly between Ministries of Health and Environment;
- (c) Examine inter-ministry implementation challenges and opportunities in developing countries, in support of the implementation of the Strategic Plan for Biodiversity 2011-2020 and the Millennium Development Goals;
- (d) Facilitate the integration of health and biodiversity concerns into updated national biodiversity strategies and action plans (NBSAPs) and in national health strategies;
- (e) Strengthen the implementation Strategic Plan with a focus on human health and well-being.

27. A number of existing collaborative mechanisms were discussed during the workshop, with a focus on strengthening existing appropriate mechanisms for collaboration or exploring new health and/or biodiversity mechanisms in order to facilitate greater cross-sector dialogue.

28. Participants were also encouraged to:

- (a) Report back on the workshop in their countries;
- (b) Include issues relevant to health and well-being in their NBSAPs;
- (c) Contact the focal points of other environmental conventions and focal points for health to collaborate on health and biodiversity issues in an effort to encourage cross-sectoral communication; and
- (d) Discuss ways for continuing collaboration and support for ongoing dialogue on health and biodiversity issues.

29. Participants attending the workshop engaged thoroughly in the workshop programme, including contributing to discussions during break-out sessions on a draft regional report for the Americas on the inter-linkages between biodiversity and health which contained key questions and was provided to participants prior to the workshop. Another important focus of the workshop was the mainstreaming of biodiversity and human health linkages into national biodiversity strategies and actions plans (NBSAPs); the potential for recognition of biodiversity and health activities in the fifth national reports; and the inclusion of biodiversity considerations in national health strategies. The workshop programme also included almost a full day of presentations and breakout sessions on the Strategic Plan and Aichi Biodiversity Targets.

30. In addition, participants were invited to voluntarily complete a survey prepared by the International University Network on Cultural and Biological Diversity (IUNCBD) that sought to gather opinions to assist in the launching of a new online Regional Forum on Biodiversity and Human Health for the Americas that will enable participants to follow up on key discussions that took place during the regional workshop and to share activities and information from their respective health and environment sectors.

31. Following focused discussions of proposed opportunities and challenges resulting from the regional workshop, the participants of the workshop suggested the following activities:

- (a) To continue collaboration between Convention on Biological Diversity and the World Health Organization to develop joint activities that will encourage inter-sectoral communication and support the implementation of the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets;

(b) To incorporate the relationships between human health and biodiversity in the updating of National Biodiversity Strategies and Action Plans (NBSAPs) and national health strategies as a means for fulfilling the Strategic Plan for Biodiversity 2011-2020;

(c) To update, publish and distribute widely the draft regional report for the Americas sent to participants in preparation for the regional workshop on the inter-linkages between biodiversity and health;

(d) To strengthen collaboration between the Convention on Biological Diversity and international bodies that deal with food and food security, given their important links with health and biodiversity;

(e) To include the role of communities, particularly indigenous and local community women as managers, protectors and transmitters of traditional knowledge, on health and food security;

(f) To emphasize the issues of health and traditional knowledge in the context of the Convention on Biological Diversity, taking into account the objectives of the Convention, Article 8(j), Article 10(c), Bonn Guidelines on Access to Genetic Resources and Distribution of Benefits, Akwé: Kon voluntary guidelines, Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, as appropriate;

(g) To carry out national and regional workshops like this one, as well as national workshops, with all relevant stakeholders, including indigenous and local communities, for the continuing promotion of information exchange and collaboration on key issues relevant to biodiversity and health;

(h) To share national and regional experiences that support the development of linkages between biodiversity and health through the exchange of information with the aim of developing a regional observatory to facilitate networking and decision-making;

(i) To strengthen epidemiological surveillance systems that also consider ecological and biodiversity indicators;

(j) To create and/or strengthen surveillance systems that include indicators to measure the benefit of biodiversity protection and conservation relating to the control of communicable and non-communicable diseases through water, soil, air, and/or food;

(k) To encourage communication and intersectoral collaboration in this area, especially between Ministries of Health and Ministries of Environment and other key stakeholders;

(l) To develop communication tools and culturally appropriate information to share experiences and practices in health and biodiversity which can be assessed, disseminated and implemented;

(m) To incorporate the issue of indigenous and traditional health taking into account stakeholders from indigenous and local communities;

(n) To recognize traditional knowledge, among other valid systems of knowledge, for information on biodiversity and health.

(o) To promote the exchange of information, knowledge and experiences among countries to develop integrated tools of territorial planning and the management of hydrological basins;

(p) To include health and biodiversity variables in environmental impact assessments;

(q) To promote the characterization of ecological risk zones for zoonotic diseases transmitted by vectors and invasive species.

32. Additional regional workshops are anticipated for 2013, including a regional workshop for Africa which is tentatively scheduled for mid-March 2013 and expected to be held in Maputo, Mozambique, in collaboration with the WHO regional office and other partners. In addition to those stated above, an added goal of the workshop in Africa is the expansion and promotion of relevant models that can encourage and enable work on the inter-linkages between environment biodiversity and health for co-benefits, such as the Libreville Declaration in the African region, which could be of interest as a model to other regions.

33. Preparatory discussions are also underway to hold additional regional workshops in 2013 including one in the European region in the second or third quarter, one in the South-East Asia region in the third quarter of 2013, and one in the Western Pacific region, in the fourth quarter 2013.<sup>4</sup> Potential partners and supporters are being actively sought to carry out these and other regional workshops.

34. Funding for eligible Parties from Ministries of Health and Ministries of the Environment to attend these and other regional workshops in 2013 is expected to be available, subject to additional financial support and the collaboration of international and regional partners.

## VI. PROGRESS REPORT ON OUTREACH MATERIALS AND ACTIVITIES

35. In addition, the Secretariat also contributed to the following publications on biodiversity and health inter-linkages:

(a) Co-authored a chapter in the book from the Symposium on Sustainable Diets that was published in August 2012, by the Food and Agriculture Organization of the United Nations (FAO) and Biodiversity International;

(b) Co-authored the Editorial in the EcoHealth journal titled “Strengthening International Cooperation for Health and Biodiversity”, in collaboration with authors from WHO, DIVERSITAS, EcoHealth Alliance and IUCN Species Survival Commission, published by Springer and the International Association for Ecology and Health. It is available at: <http://rd.springer.com/article/10.1007/s10393-012-0764-8>;

(c) Co-authored an article titled “Towards a Better Integration of Global Health and Biodiversity in the New Sustainable Development Goals beyond Rio+20” for publication as a Forum piece in EcoHealth journal, in collaboration with authors from Global Health Unit, University of Montreal Hospital Center, DIVERSITAS, EcoHealth Alliance and IUCN Species Survival Commission. On-line publication is scheduled to occur in September 2012 and will be available from: <http://www.springerlink.com/content/1612-9202/>.

36. A desktop analysis of national biodiversity strategies and action plans and fourth national reports has been initiated to examine evidence of the integration of human health and well-being into national biodiversity-related implementation activities. The development of further outreach materials and activities will be based on this analysis, as well as on outcomes of the capacity-building workshops and based on the input of international and regional partners.

37. New website content is being regularly loaded under a new health section on the CBD website (see [www.cbd.int/en/health](http://www.cbd.int/en/health)). Material developed by the Secretariat for posting is being complemented by links to a range of resources produced by relevant partners to ensure a diverse source of guidance that targets the interests of international and national policy makers, the private sector, civil society organisations and local communities to better communicate the ways human health depends on biodiversity.

38. A compilation of international research is underway that focuses on mutual benefits for children and biodiversity from children’s contact with nature, including an examination of current or potential policies that can support achievement of Aichi Biodiversity Target 1 (By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably), with the support of the governments of Canada and Japan. It is expected that this information will be used to produce fact sheets, contribute to CBD website content and provide references for future consideration.

## VII. CONTRIBUTIONS TO KNOWLEDGE GENERATION AND LESSON-SHARING

39. In an effort to contribute to the body of knowledge on biodiversity and health and to share relevant good practices and learnings, a Guide to Human Health and Biodiversity has been developed, with input and

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<sup>4</sup> Based on the WHO regional divisions available at: <http://www.who.int/about/regions/en/index.html>

support of relevant partners, using funds from the Government of Japan. The Guide acts as a primer on health and biodiversity and includes case studies that promote the integration of health and biodiversity issues, while highlighting potential for the sharing and application of knowledge gathered from these case studies. This Guide, along with a Good Practice Guide on Food Security, will be released during a side event at the eleventh meeting of the Conference of the Parties.

40. In addition, an outline for a CBD Technical Series on Biodiversity and Human Health will be available for discussion at a side event during the eleventh meeting of the Conference of the Parties. This technical series will be published in 2013 and serve as a state of knowledge review addressing several key issues relevant to biodiversity and human health. Confirmed partners include DIVERSITAS and EcoHealth Alliance, with additional technical advice from the World Health Organization.

41. It has been found that a simple summary of the complex inter-linkages between health and biodiversity inter-linkages can be a useful support tool for communication and for discussions regarding cross-sectoral collaboration. The CBD Secretariat drafted a summary table of these inter-linkages in preparation for the sixteenth meeting of the Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA-16) and the WHO-CBD workshop, taking into account health-related topics, opportunities to address health issues while considering biodiversity and describing the benefits to biodiversity as defined by the Aichi Biodiversity Targets.

42. The following summary table is presented as a work in progress for further comments, adaptation and use by Parties, other Governments, relevant international organizations and partners.

**Summary Table of Health and Biodiversity linkages in support of the Aichi Biodiversity Targets**

Health Topic	Health Sector Opportunity	Benefits to Biodiversity (Aichi Targets)
<p><b>1. Food</b></p> <ul style="list-style-type: none"> <li>• Species, varieties and breeds including domesticated and wild components</li> <li>• Diversity of diet</li> <li>• Ecology of production systems</li> <li>• Total demand on resources</li> </ul>	<p>Direct</p> <ul style="list-style-type: none"> <li>• Recognize and promote dietary diversity, food cultures and their contribution to good nutrition</li> <li>• Recognize synergies between human health and sustainable use of biodiversity (e.g. moderate consumption of meat)</li> </ul> <p>Indirect</p> <ul style="list-style-type: none"> <li>• <i>Promote sustainable production harvesting and conservation of agricultural biodiversity</i></li> </ul>	<p>T1 (values of biodiversity) T4 (sustainable production and consumption) T5 (reduce habitat loss) T6 (sustainable harvesting) T7 (sustainable management) T13 (genetic diversity) T14 (ecosystem services)</p>
<p><b>2. Water</b></p> <ul style="list-style-type: none"> <li>• Water quantity</li> <li>• Water quality</li> <li>• Water supply</li> </ul>	<p>Direct</p> <ul style="list-style-type: none"> <li>• Integrate ecosystem management considerations into health policy</li> </ul> <p>Indirect</p> <ul style="list-style-type: none"> <li>• <i>Promote protection of ecosystems that supply water and promote sustainable water use</i></li> </ul>	<p>T1 (values of biodiversity) T5 (reduce habitat loss) T8 (reduce pollution) T9 (invasive alien species) T11 (protected areas) T14 (ecosystem services)</p>
<p><b>3. Diseases</b></p> <ul style="list-style-type: none"> <li>• Disease source and regulation services</li> <li>• Ecosystem integrity and diversity</li> </ul>	<p>Direct</p> <ul style="list-style-type: none"> <li>• Integrate ecosystem management considerations into health policy</li> </ul> <p>Indirect</p> <ul style="list-style-type: none"> <li>• <i>Promote ecosystem integrity</i></li> </ul>	<p>T1 (values of biodiversity) T2 (poverty reduction strategies) T5 (reduce habitat loss) T8 (reduce pollution) T9 (invasive alien species) T14 (ecosystem services)</p>

<p><b>4. Traditional and Modern Medicine</b></p> <ul style="list-style-type: none"> <li>• Traditional medicines</li> <li>• Drug development (genetic resources and traditional knowledge)</li> <li>• Chemical/ pharmaceutical accumulation in ecosystems</li> </ul>	<p>Direct</p> <ul style="list-style-type: none"> <li>• Recognize contribution of genetic resources and traditional knowledge to medicine</li> <li>• Recognize and monitor impacts of drug accumulation (human, veterinary and agricultural sources) on ecosystems.</li> </ul> <p><i>Indirect</i></p> <ul style="list-style-type: none"> <li>• <i>Protect genetic resources and traditional knowledge and ensure benefit sharing</i></li> </ul>	<p>T1 (values of biodiversity) T5 (reduce habitat loss) T13 (genetic diversity) T14 (ecosystem services) T16 (Nagoya Protocol) T18 (local/traditional knowledge)</p>
<p><b>5. Physical, mental and cultural well-being</b></p> <ul style="list-style-type: none"> <li>• Physical and mental health</li> <li>• Cultural/spiritual enrichment</li> </ul>	<p>Direct</p> <ul style="list-style-type: none"> <li>• Integrate 'value of nature' into health policy including mental health and non-comm. diseases</li> </ul> <p><i>Indirect</i></p> <ul style="list-style-type: none"> <li>• <i>Promote protection of values, species and ecosystems</i></li> </ul>	<p>T1 (values of biodiversity) T2 (poverty reduction strategies) T11 (protected areas) T12 (preventing extinctions) T13 (genetic diversity) T14 (ecosystem services) T18 (local/traditional knowledge)</p>
<p><b>6. Adaptation to climate change</b></p> <ul style="list-style-type: none"> <li>• Ecosystem resilience</li> <li>• Genetic resources ('options' for adaptation)</li> </ul>	<p><i>Indirect</i></p> <ul style="list-style-type: none"> <li>• <i>Promote ecosystem resilience and conservation of genetic resources</i></li> </ul>	<p>T1 (values of biodiversity) T3 (reduce negative subsidies) T5 (reduce habitat loss) T8 (reduce pollution) T10 (vulnerable ecosystems) T14 (ecosystem services) T15 (ecosystem resilience)</p>

*Cross-cutting: Target 17 (national biodiversity strategies and action plans), Target 19 (knowledge, science and technology) and Target 20 (resource mobilization).*

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